

Product Range

Solutions in winding and yarn processing machines



Leading technology for yarn
processing and winding



SSM Schärer Schweiter Mettler AG

Product range – machine solutions in winding and yarn processing

SSM, based in Wädenswil (Switzerland), is a subsidiary of the Rieter Group. SSM is the world's leading supplier of precision winding machines in the fields of dyeing, weaving and sewing thread preparation and enjoys success in individual segments of filament yarn production. SSM consists of the companies SSM Schärer Schweiter Mettler AG in Wädenswil, SSM Italy and SSM China. SSM is represented worldwide in all major markets.

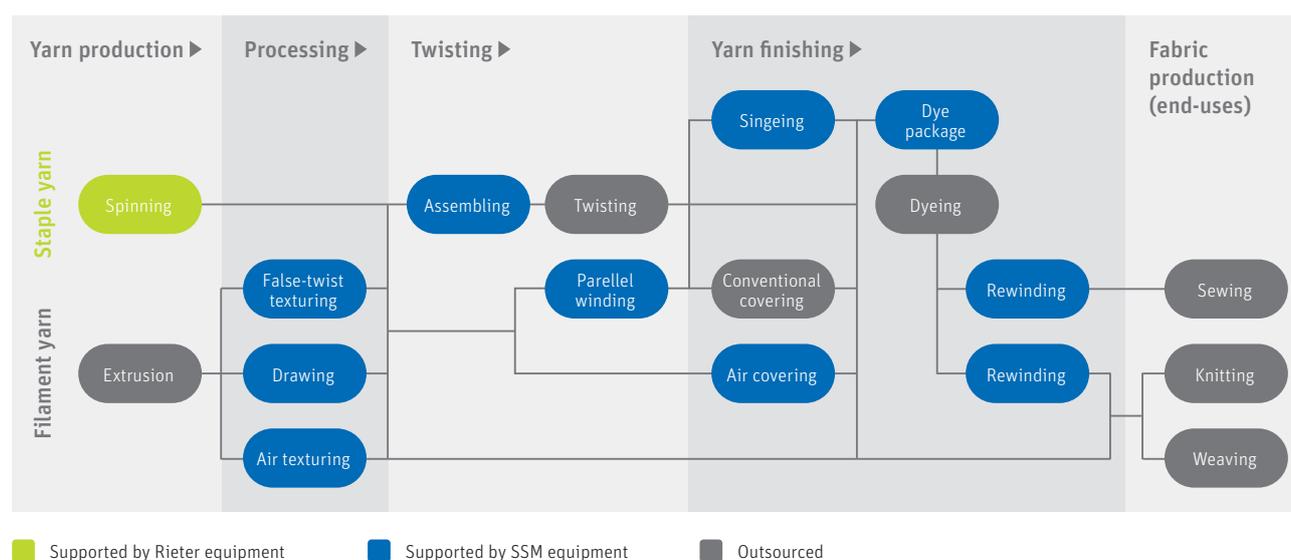
Fields of activity

More than 165 years of corporate history have made SSM a textile engineering specialist and thus an ideal partner. SSM's expertise includes development, production, sales and distribution. The company provides any service relating to textile machinery such as support, maintenance or repairs which result in high levels of customer satisfaction. Fulfilling customer requirements is a priority, deeply rooted in SSM's DNA.

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Textile production chain



Dye Package Rewinding



NEO Series

High precision package winders



NEO-FW precision package winder

Type of winding	DIGICONE 2 or precision
Mechanical speed	up to 1 500 m/min
Drive	individual
Yarn laying	<i>fastflex</i> electronic yarn laying system
Package shape	freely programmable
Take-up tubes	cylindrical or cones up to 5° 57'
Traverse length	25 – 210 mm electronically adjustable
Yarns	staple yarns and textured filament yarns
Yarn count	Ne 3 – 80
Number of spindles min./max.	6/96 (single sided) and 12/120 (double sided, 2 × 60 back to back)



NEO-YW precision package winder

Type of winding	DIGICONE 2 or precision
Mechanical speed	up to 2 000 m/min
Drive	individual
Yarn laying	<i>fastflex</i> electronic yarn laying system
Package shape	freely programmable
Take-up tubes	cylindrical or cones up to 5° 57' (for filaments up to 3° 30')
Traverse length	25 – 270 mm electronically adjustable
Yarns	textured or flat filaments, elastic yarns, silk, fine technical yarns, staple yarns
Yarn count	10 – 3 000 dtex
Number of spindles min./max.	6/96 (single sided) and 12/120 (double sided, 2 × 60 back to back)



NEO-BW precision package winder

Type of winding	DIGICONE 2 or precision
Mechanical speed	up to 1 600 m/min
Drive	individual
Yarn laying	yarn laying system with counter rotating blades
Package shape	cylindrical or conical
Take-up tubes	cylindrical or cones up to 4° 20'
Traverse length	155 mm, mechanically adjustable ± 5 mm
Yarns	all kinds of staple yarns
Yarn count	Ne 1.2 – 120
Number of spindles min./max.	6/96 (single sided) and 12/120 (double sided, 2 × 60 back to back)

XENO Series

High precision winding machine



XENO-YW precision package winder

Type of winding	DIGICONE 2 or precision
Mechanical speed	up to 2 500 m/min
Drive	individual
Yarn laying	<i>fastflex</i> electronic yarn laying system
Package shape	freely programmable
Take-up tubes	cylindrical or cones up to 5° 57'
Traverse length	25 – 270 mm electronically adjustable
Yarns	staple yarns, monofilament, textured, flat and twisted filaments, medium technical yarns
Yarn count	Ne 1.5 – 240
Number of spindles min./max.	5/80 (single sided) and 10/80 (double sided, 2 × 40 back to back)



XENO-YW *precitens*, combi winder

Type of winding	DIGICONE 2 or precision
Mechanical speed	up to 2 500 m/min
Drive	individual
Yarn laying	<i>fastflex</i> electronic yarn laying system
Package shape	freely programmable
Take-up tubes	cylindrical or cones up to 3° 30'
Traverse length	25 – 270 mm electronically adjustable
Yarns	high elastic filament yarns (PA or PES DTY)
Yarn count	22 – 800 dtex
Number of spindles min./max.	5/60 (single sided)

DURO and PWX Series

Technical yarns and muff winding



DURO-TW precision package winder, technical yarns

Type of winding	DIGICONE or precision
Mechanical speed	up to 1 500 m/min
Drive	individual
Yarn laying	<i>fastflex</i> electronic yarn laying system
Package shape	freely programmable
Take-up tubes	cylindrical or cones up to 3° 30'
Traverse length	25 – 320 mm infinitely variable
Yarns	all staple and filament yarns
Yarn count	up to 50 000 dtex
Number of spindles min./max.	2/40 (single sided)



PWX-CTM cone-to-muff winder

Type of winding	DIGICONE or precision
Mechanical speed	up to 1 500 m/min
Drive	individual
Yarn laying	<i>fastflex</i> electronic yarn laying system
Package shape	freely programmable
Expander	200 – 350 or 250 – 500 mm
Traverse length	25 – 270 mm electronically adjustable
Yarns	all elastic filament yarns (PA or PES DTY)
Yarn count	10 – 1 200 dtex
Number of spindles min./max.	4/48 (single sided)



PWX-MTC muff-to-cone winder

Type of winding	DIGICONE or precision
Mechanical speed	up to 1 200 m/min
Drive	individual
Yarn laying	<i>fastflex</i> electronic yarn laying system
Package shape	freely programmable
Take-up tubes	cylindrical or cones up to 3° 30'
Traverse length	25 – 270 mm electronically adjustable
Yarns	all elastic filament yarns (PA or PES DTY)
Yarn count	10 – 1 200 dtex
Number of spindles min./max.	5/60 (single sided)

CWX Series

Winding machine



CWX-W random winding machine

Type of winding	random
Mechanical speed	up to 1 500 m/min
Drive	individual
Yarn laying	yarn laying system with grooved drum
Package shape	cylindrical or cones
Take-up tubes	cylindrical or cones up to 5° 57'
Traverse length	152 mm (6")
Take-up package diameter	up to 270 mm
Yarns	staple yarns
Yarn count	Ne 3 - 120
Number of spindles min./max.	16/128 (8 double-sided sections)

Air Texturing



T-Series

Advanced yarn creation technology



DP5-T automatic air texturing machine

Type of winding	DIGICONE or precision
Mechanical speed	up to 1 500 m/min
Drive	individually driven and controlled
Yarn laying	<i>fastflex</i> electronic yarn laying system
Tubes/package shape	cylindrical tubes, freely programmable
Traverse length	100 – 270 mm infinitely variable
Yarns/count range DP5-TF - yarn path type 3	PES and PP up to 1 500 dtex, PA up to 650 dtex
Yarns/count range DP5-TC - yarn path type 1, 3	PES and PP up to 4 000 dtex, PA up to 1 400 dtex
Yarns/count range DP5-TC - yarn path type 6	PES and PP up to 2 000 dtex, PA up to 700 dtex
Number of spindles min./max.	5/40 (single sided)
Supply package diameter	up to 400 mm (on rotary creel)



TG2-AT automatic air texturing machine

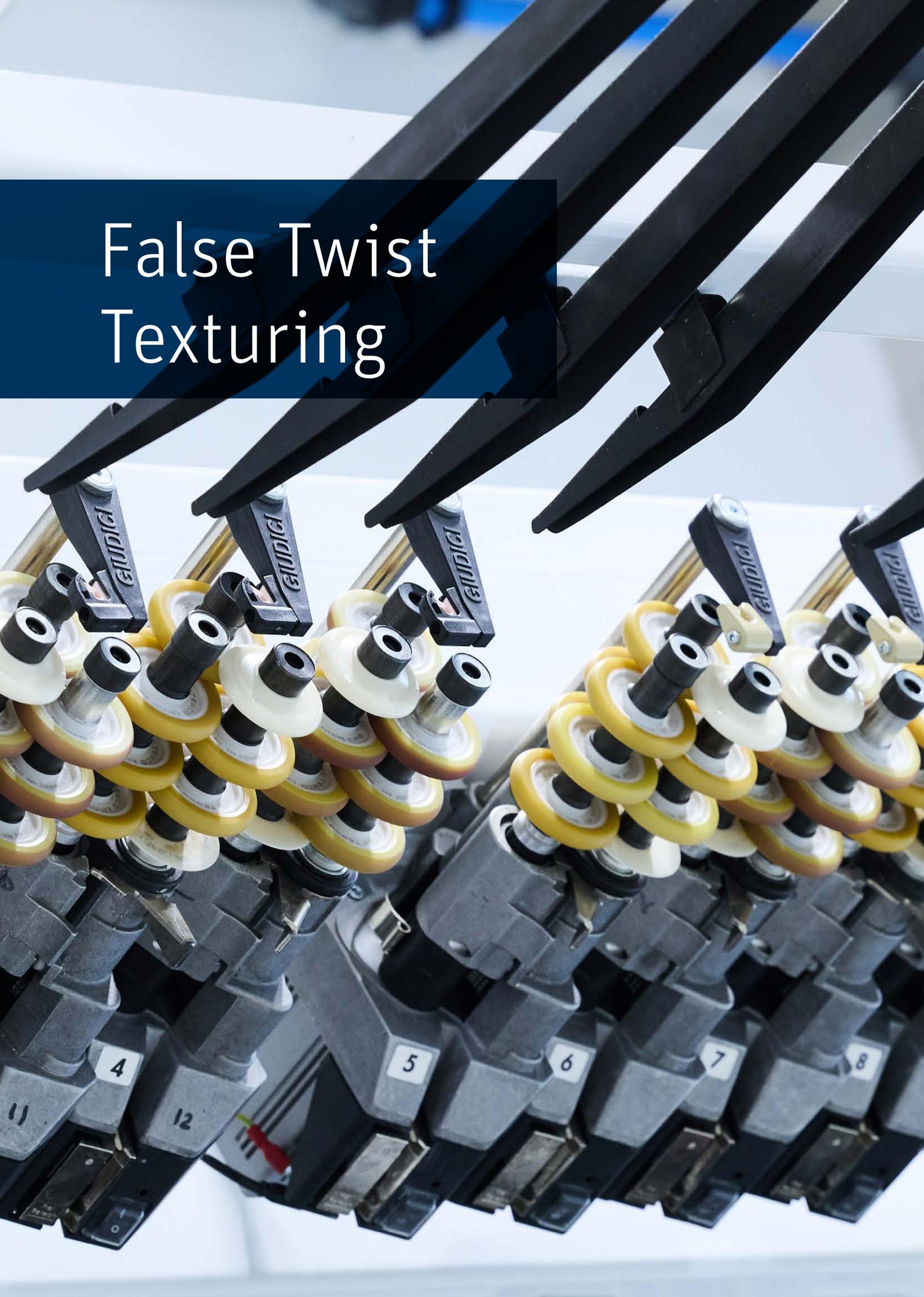
Type of winding	random
Mechanical speed	up to 1 200 m/min (speed of overfeed shafts)
Drive	individually controlled line shafts
Tubes/package shape	cylindrical or bi-conical, up to \varnothing 240 mm
Traverse length	190 or 245 mm
Yarns	PA, PP, PES/POY & FDY
Yarn count	55 – 660 den
Layout	double sided
Number of spindles min./max.	24/288
Supply package	2 ends and stand-by per position: $\leq \varnothing$ 450 mm, \leq 250 mm tube length



TG1-AT manual air texturing machine

Type of winding	random
Mechanical speed	up to 1 200 m/min (speed of overfeed shafts)
Drive	individually controlled line shafts
Tubes/package shape	cylindrical or bi-conical, up to \varnothing 250 mm
Traverse length	190 or 245 mm
Yarns	PA, PP, POY and FOY fine count PES
Yarn count	55 – 660 den
Layout	double sided
Number of spindles min./max.	24/288
Supply package	2 ends and stand-by per position: $\leq \varnothing$ 450 mm, \leq 250 mm tube length

False Twist Texturing



FT-Series

A well established process for bulk and elasticity



DP5-FT automatic false-twist texturing machine

Type of winding	DIGICONE or precision
Mechanical speed	up to 1 500 m/min
Drive	individually controlled single drives
Yarn laying	<i>fastflex</i> electronic yarn laying system
Tubes/package shape	cylindrical tubes freely programmable up to Ø 300 mm
Traverse length	100 – 270 mm electronically adjustable
Yarns	PP, PA, PES, PBT/POY
Yarn count	7 – 1 320 dtex
Number of spindles min./max.	5/40 (single sided)
Supply package (on rotary or trolley creel)	on rotary creel: 2 or 4 ends + reserve on trolley creel: 4 ends + reserve 290 mm tube length: up to Ø 400 mm 150 mm tube length: up to Ø 450 mm



TG2-FT automatic false-twist texturing machine

Type of winding	random
Mechanical speed	up to 1 100 m/min
Drive	individually controlled line shafts
Tubes/package shape	cylindrical or bi-conical, up to Ø 240 mm
Traverse length	190 or 245 mm
Yarns	PA and combinations with fine count PES or PBT (no FTF), EL/POY
Yarn count	7 – 330 dtex
Layout	double sided
Number of spindles min./max.	24/288
Supply package (on trolley creel)	1 end and stand-by per position: 250 mm tube length: up to Ø 450 mm 150 mm tube length: up to Ø 450 mm



TG1-FT manual false-twist texturing machine

Type of winding	random
Mechanical speed	up to 1 100 m/min
Drive	individually controlled line shafts
Tubes/package shape	cylindrical or bi-conical, up to Ø 220 mm
Traverse length	190 or 245 mm
Yarns	PA and combinations with fine count PES or PBT (no FTF), EL/POY
Yarn count	7 – 330 dtex
Layout	double sided
Number of spindles min./max.	32/384
Supply package (on trolley creel)	1 end and stand-by per position: 250 mm tube length: up to Ø 450 mm 150 mm tube length: up to Ø 450 mm

TG30 Series

Long shaft false-twist machine



TG30 A auto-doffing false-twist texturing machine

Type of winding	random
Mechanical speed	up to 1 100 m/min
Drive	individually controlled line shafts
Tubes/package shape	cylindrical or bi-conical, up to Ø 250 mm
Traverse length	190 or 245 mm
Yarns	PA, PP and combinations with fine count PES or PBT (no FTF) / POY
Yarn count	7 – 330 dtex
Number of spindles min./max.	12/168 (single sided)
Supply package (on trolley creel)	1 end and stand-by per position: 290 mm tube length: up to Ø 400 mm 150 mm tube length: up to Ø 450 mm



TG30 AEM auto-doffing false-twist & air covering

Type of winding	random
Mechanical speed	up to 1 100 m/min
Drive	individually controlled line shafts
Tubes/package shape	cylindrical or bi-conical, up to Ø 250 mm
Traverse length	190 or 245 mm
Yarns	PA and combinations with fine count PES or PBT (no FTF), EL/POY
Yarn count	7 – 330 dtex
Number of spindles min./max.	12/168 (single sided)
Supply package (on trolley creel)	1 end and stand-by per position: 290 mm tube length: up to Ø 400 mm 150 mm tube length: up to Ø 450 mm



TG30 2BA auto-doffing false-twist texturing

Type of winding	random
Mechanical speed	up to 1 100 m/min
Drive	individually controlled line shafts
Tubes/package shape	cylindrical or bi-conical, up to Ø 250 mm
Traverse length	190 or 245 mm
Yarns	PA and combinations with fine count PES or PBT (no FTF) (PP on request)/ POY
Yarn count	14 – 660 dtex (2-ply)
Number of spindles min./max.	8/ 80 (single sided)
Supply package (on trolley creel)	up to 2 ends and stand-by per position: 290 mm tube length: up to Ø 400 mm 150 mm tube length: up to Ø 450 mm

Air Covering



XENO Series

Flexible production of elastic yarns



XENO-AC air covering machine

Type of winding	DIGICONE 2 or precision
Mechanical speed	up to 2 000 m/min
Drive	individual
Yarn laying	<i>fastflex</i> electronic yarn laying system
Package shape	freely programmable
Take-up tubes	cylindrical
Traverse length	25 – 270 mm infinitely variable
Yarns	filament yarns, Elastane
Yarn count	22 – 3 300 dtex
Number of spindles min./max.	5/80 (single sided)
Supply package diameter	1-ply: up to 300 mm 2-ply: up to 240 mm 3-ply: up to 200mm



XENO-AC TWIN air covering for dual core spun yarn

Type of winding	DIGICONE 2 or precision
Mechanical speed	up to 2 000 m/min
Drive	individual
Yarn laying	<i>fastflex</i> electronic yarn laying system
Package shape	freely programmable
Take-up tubes	cylindrical
Traverse length	25 – 270 mm infinitely variable
Yarns	filament yarns, Elastane
Yarn count	22 – 3 300 dtex
Number of spindles min./max.	5/80 (single sided)
Supply packages	special peg for T-400 supply packages (two per position)

Draw Winding



DP5-S Series

Tailored-made drawn yarns



DP5-S POY draw winding machine

Type of winding	DIGICONE or precision
Mechanical speed	up to 1 500 m/min
Positions and feeders	individually driven and controlled
Yarn laying	<i>fastflex</i> electronic yarn laying system
Tubes/Package shape	cylindrical tubes, freely programmable
Traverse length	100 – 270 mm electronically adjustable
Yarns	POY, FDY/FOY
Count range DP5-SF	PES, PBT and PP up to 1 000 dtex, PA up to 330 dtex
Count range DP5-SC	PES, PBT and PP up to 2 000 dtex, PA up to 700 dtex
Number of spindles min./max.	5/40 (single sided)
Supply package diameter	up to 400 mm (on stationary creel)



DP5-S draw heat setting winder

Type of winding	DIGICONE or precision
Mechanical speed	up to 1 500 m/min
Positions and feeders	individually driven and controlled
Thread laying	<i>fastflex</i> electronic thread laying system
Tubes/Package shape	cylindrical tubes, freely programmable
Traverse length	100 – 270 mm electronically adjustable
Yarns	filament sewing thread, twisted technical yarn
Count range/draw force DP5-SF	PES and PA yarn path 11: 50 to 1 000 dtex, up to 25 N draw force yarn path 12: 50 to 2 500 dtex, up to 25 N draw force
Count range/draw force DP5-SC	PES and PA yarn path 12: 50 to 4 000 dtex, up to 40 N draw force
Number of spindles min./max.	5/40 (single sided)
Supply package diameter	up to 220 mm

Assembly Winding



D-Series

Well assembled is half twisted



NEO-FD precision package winder

Type of winding	DIGICONE 2 or precision
Mechanical speed	up to 1 500 m/min
Drive	individual
Yarn laying	<i>fastflex</i> electronic yarn laying system
Package shape	freely programmable
Take-up tubes	cylindrical or cones up to 5° 57'
Traverse length	25 – 210 mm electronically adjustable
Yarns	staple yarns and textured filament yarns
Yarn count	Ne 3 – 140
Number of spindles min./max.	6/96 (single sided) and 12/120 (double sided, 2 × 60 back to back)



XENO-YD precision assembly winder

Type of winding	DIGICONE 2 or precision
Mechanical speed	up to 2 500 m/min
Drive	individual
Yarn laying	<i>fastflex</i> electronic yarn laying system
Package shape	freely programmable
Take-up tubes	cylindrical or cones up to 5° 57'
Traverse length	25 – 270 mm electronically adjustable
Yarns	staple yarns, monofilament, textured, flat and twisted filaments, medium technical yarns
Yarn count	Ne 1.5 – 240
Number of spindles min./max.	5/ 80 (single sided) and 10/80 (double sided, 2 × 40 back to back)



DURO-TD precision assembly winder, technical yarns

Type of winding	DIGICONE, open or closed precision
Mechanical speed	up to 1 500 m/min
Drive	individual
Yarn laying	<i>fastflex</i> electronic yarn laying system
Package shape	freely programmable
Take-up tubes	cylindrical or cones up to 3° 30'
Traverse length	25 – 320 mm infinitely variable
Yarns	all staple and filament yarns
Yarn count	up to 50 000 dtex
Number of spindles min./max.	2/40 (single sided)

CWX Series

Assembly machine



CWX-D random assembly winder

Type of winding	random
Mechanical speed	up to 1 300 m/min
Drive	individual per spindle
Yarn laying	yarn laying system with grooved drum
Tubes/package shape	cylindrical or cones up to 5° 57'
Traverse length	152 mm (6")
Supply package diameter	2-ply: up to 280 mm 3-ply: up to 240 mm
Yarns	staple yarns
Yarn count	Ne 3 – 120
Number of spindles min./max.	10/80 (8 double-sided sections)

Sewing Thread Finish Winding



Thread King III Series

New standard in sewing thread finish winding



Thread King III CT automatic finish winder

Type of winding	precision crosswind
Mechanical speed	up to 2 500 m/min (up to 15 000 min ⁻¹)
Drive	individual double drive system per spindle
Thread laying	thread laying system with slit drum
Package shape	cones up to 5° 57'
Traverse length	3" – 6"
Yarns	spun thread/core spun, textured filament, technical thread, special thread
Yarn count	Ne 1.8 and finer/up to 3 300 dtex with automatic doffing Ne 1.2 and finer/up to 5 000 dtex with manual doffing
Number of spindles min./max.	5/50

with automatic slit-drum opening



Thread King III KT automatic finish winder

Type of winding	precision crosswind
Mechanical speed	up to 2 500 m/min (up to 15 000 min ⁻¹)
Drive	individual double drive system per spindle
Thread laying	thread laying system with slit drum
Package shape	kingspools up to 2°
Traverse length	1.5" – 6"
Yarns	filament twisted/flat, textured filament, natural silk, viscose/rayon, technical thread, special thread
Yarn count	up to 3 300 dtex with doffer up to 5 000 dtex without doffer
Number of spindles min./max.	5/50

with automatic slit-drum opening



Thread King III TT automatic finish winder

Type of winding	precision crosswind
Mechanical speed	up to 2 500 m/min (up to 15 000 min ⁻¹)
Drive	individual double drive system per spindle
Thread laying	thread laying system with slit drum
Package shape	cylindrical tubes (cops)
Traverse length	1.5" – 4"
Yarns	spun thread/core spun, filament twisted/flat, textured filament, natural silk, viscose/rayon, technical thread, special thread
Yarn count	up to 3 300 dtex
Number of spindles min./max.	5/50

with automatic slit-drum opening

Thread King III Series

Kingspool winder



Thread King III KTE automatic finish winder

Type of winding	precision crosswind
Mechanical speed	up to 1 500 m/min
Drive	individual double drive system per spindle
Thread laying	<i>fastflex</i> electronic thread laying system
Package shape	kingspools up to 2° q winding standard configuration p winding optional configuration
Traverse length	2" – 6" (infinitely variable)
Yarns	bonded filament thread, technical thread, special thread, textured filament yarn, twisted/flat filament thread
Yarn count	up to 3 300 dtex
Number of spindles min./max.	5/50

with automatic final end tuck-in



Thread King III KE manual finish winder

Type of winding	precision crosswind
Mechanical speed	up to 1 500 m/min
Drive	individual double drive system per spindle
Thread laying	<i>fastflex</i> electronic thread laying system
Package shape	kingspools up to 2° q winding standard configuration p winding optional configuration
Traverse length	2" – 6" (infinitely variable)
Yarns	bonded filament thread, technical thread, special thread, textured filament yarn, twisted/flat filament thread
Yarn count	up to 5 000 dtex
Number of spindles min./max.	5/50

Parallel Winding



FM Series

Flanged bobbins for conventionally covered yarns



FM1 manual precision parallel winder

Type of winding	p and q parallel winding
Mechanical speed	up to 1 800 m/min
Spindle speed	up to 16 800 min ⁻¹
Drive	individual
Yarn laying	<i>preciflex</i> electronic yarn laying system
Package shape	double/single flanged bobbins, mini cops
Traverse length	25 - 165 mm infinitely variable
Yarns	filaments (FDY, DTY, POY), staple yarns
Yarn count	FDY, DTY, staple yarns: up to 1 000 dtex POY: 11 - 40 dtex (with optional cold drawing roller)
Number of spindles min./max.	18/108 (double sided)

SSM Digital Suite



Nema, SSM Digital Suite

Digitization to unlock performance and growth potential



Nema digital suite

To support customers on their digital journey and maximize the value of their digital transformation, SSM presents Nema, a digital suite allowing near real-time monitoring of connected machines, anytime, anywhere. With a clear overview of key performance indicators, Nema supports customers in taking data-driven actions in a timely manner and thus helps minimize downtime and waste.

Advantages:

- Remote monitoring, anytime, anywhere
- Near real-time machine health monitoring
- Secure connection
- Production optimization

Terminal type/ production date	SSM machine platforms	Requirements
MT8/2017 or later	XENO, DURO, TK2-20, DP5, FM1, X-Series, NEO	Connectivity kit MT8 software update
MT8/2016 or prior	XENO, DURO, TK2-20, DP5, GSX-3, FM1, X-Series	Connectivity kit Trizeps 7 upgrade on MT8
Others	Any machine without MT8	On a case-by-case basis

A close-up photograph of a large spool of dark blue yarn mounted on a metallic textile machine. The spool is cylindrical and filled with a dense, textured yarn. The machine components are made of polished metal, and the background is a plain, light color.

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